

The Terrorism Prevention in Hazardous Materials Transportation Act of 2005
Councilmember Patterson's Statement on Introduction
January 28, 2005

Introduction

We introduce this bill to eliminate a grave and immediate danger faced by residents of the District of Columbia -- the threat that terrorists might attack a large-volume shipment of ultrahazardous materials transported through the District, causing a massive explosion and/or release of toxic chemicals. Studies have shown that such an attack could create a deadly toxic cloud extending 14 miles, killing or injuring up to 100,000 people within 30 minutes and resulting in billions of dollars of economic damage. As noted by the District's congressional representative, the Honorable Eleanor Holmes Norton, this is the "single greatest unaddressed security threat to the City."

Two facts make the prospect of such an attack particularly dangerous to those who live and work in the District:

First, as the nerve center of our government, the District of Columbia is a prominent terror target, requiring extraordinary measures to protect its citizens, workers, and visitors against terror attacks. The District was one of two U.S. cities targeted by international terrorists in the attacks of September 11, 2001. Even before those attacks, the Capitol Building had a long and unparalleled history as a target for terrorists. Travelers are reminded of this every time they fly into or out of the airport closest to the Capitol (Reagan National Airport) and are subject to a precaution, required in no other airport in the United States, that they remain seated for 30 minutes after take-off and before landing. General aviation aircraft are barred from an FAA-imposed no-fly zone for 30 miles around the Washington Monument without special permission. As demonstrated by the tens of millions of dollars spent on security for the recent Inauguration Day festivities (including over \$11 million of the District's dedicated Homeland Security funds), the presence of numerous political figures in Washington makes it a singularly attractive terrorist target.

Second, notwithstanding that this massive danger has been obvious for a least three years, we remain vulnerable to a terror attack on the high-volume shipments of ultrahazardous materials that continue to travel through the District. No enforceable or regulatory action has been taken by the Federal Government to eliminate this threat. Trains and trucks filled with hazardous materials continue to be allowed to pass within blocks of the Capitol building on a regular basis. The presence of such dangerous shipments provides terrorists with the opportunity to cause hundreds of thousands of casualties with nothing more than a bazooka, grenade-launcher or readily available conventional explosives. There is no reason to permit such dangerous and

vulnerable shipments to pass a short distance away from American's center of government (and the neighborhoods surrounding it) when they can be transported just as efficiently and far more safely through rail or truck routes that avoid major terrorism targets such as the District.

Based on the legislative findings detailed below, the D.C. Council should enact this Bill as a necessary and appropriate measure to protect the lives and well being of District residents.

Findings

A terrorist attack on a large quantity hazardous materials shipment within the Capitol Exclusion Zone would be expected to cause tens of thousands of deaths and catastrophic economic impacts of \$5 billion or more.

Recently the Federal Bureau of Investigation ("FBI") reported that terrorists are specifically interested in "targeting hazardous material containers" in attacks on rail cars on U.S. soil. (October 24, 2002 FBI alert). The Department of Homeland Security ("DHS") has reported that terrorists also may seek to use trucks carrying such materials as weapons. (July 30, 2004 DHS advisory).

If terrorists succeeded in such an attack in the area surrounding the Capitol, the result would be catastrophic. A chlorine cloud emanating from a ruptured railcar can move 2 miles in 10 minutes, (U.S. Coast Guard Report cited in Jan. 23, 2004 Testimony of Fred Millar before the Council of the District of Columbia) and produce a cloud of deadly gas stretching over 14 miles. (The Chlorine Institute, Pamphlet 74.)¹

The casualty count resulting from such an attack would be enormous, dwarfing the number of fatalities in the attacks of September 11, 2001. A recent simulation found that if an attack occurred during a celebration or political event in a setting similar to the National Mall, people could die at a rate of over 100 per second and up to 100,000 people would die within the first 30 minutes. *See* Presentation of Dr. Jay Boris, U.S. Naval Research Laboratory, to D.C. Council, October 6, 2003. A July 2004 study by the Homeland Security Council estimated that even under less crowded conditions, an attack in an urban area would result in 17,500 deaths, 10,000 severe injuries and 100,000 hospitalizations. *See* Planning Scenarios: Executive Summaries Created for Use in National, Federal, State and Local Homeland Security Preparedness Initiatives, The Homeland Security Council, July 2004, Scenario 8.

Existing transportation safety regulations designed to protect against spills or other accidents were not designed to address these risks, and will not prevent such outcomes. A typical railroad tank car will not withstand readily available conventional terror weapons. Unlike a hazardous

¹ A report by Jay Boris of the U.S. Naval Research Laboratory similarly found that a plume of hazardous materials would reach 3 to 4 miles away from the site of the attack in less than 30 minutes. *See* Presentation of Dr. Jay Boris, U.S. Naval Research Laboratory, to D.C. Council, October 6, 2003.

materials accident, the location and timing of which will largely be due to chance, a hazardous material release caused by terrorism likely would be planned to occur under conditions that are most difficult to manage and that would inflict maximum casualties. Indeed, while the studies described above assume that hazardous chemicals would only be released from a single rail car, terrorists might well attack and cause releases from multiple rail car tanks simultaneously, just as they used multiple planes to target the World Trade Center on September 11, 2001. Doing so would cause an even greater number of deaths and serious injuries.

The District's emergency services providers are not equipped to respond to such events. As the Council was told by a physician testifying during hearings, first responders -- such as police, firefighters, and medical personnel -- would be overwhelmed and the release of toxic gases would "kill people immediately before all of our emergency readiness can be of any use." Jan. 23, 2004 Testimony of Benjamin A. Gitterman, before the Council of the District of Columbia, at 2. Like everyone else remaining inside the cloud of ultrahazardous materials extending 3 to 4 miles from the attack, first responders in that area would also likely die within 30 minutes.

Such an attack would also cause immense damage and disruption to the local economy. Apart from the large numbers of deaths, the neighborhoods surrounding the city may be uninhabitable for many days, as Graniteville, South Carolina was in the wake of a limited accidental chlorine release on January 6, 2005. The cost of repairing and recovering from the damage would be immense. The likely economic impact of a large chlorine release could easily exceed \$5 billion.

Federal agencies have recognized that the security concerns raised by possible terror attacks on hazardous rail shipments are not adequately addressed by rules pertaining to accidental releases. *See, e.g.*, 68 Fed Reg. 14514 (March 25, 2003) (existing regulations "focused on safety, not security" and are insufficient for preventing products from being used "as weapons of opportunity" or as ingredients in "weapons of mass destruction").

The terrorism threat facing D.C. residents and workers in the vicinity of the Capitol Exclusion Zone requires a response that recognizes and addresses the unique status of this area in American political life and history, and the terrorism risk that results from this status.

The Capitol's status as the nerve center of American political life has long made it highly attractive for terror groups. Even before September 11, 2001, the Capitol building has been subject to repeated attacks (or attempted attacks) by terror organizations. In 1954, members of a Puerto Rican nationalist group wounded five representatives while shooting onto the House floor. Bombs were detonated inside the Capitol Building in 1971 and in 1983. On September 11 itself, the Capitol area was the target of the plane that crashed in Shanksville, Pennsylvania. *See* "Details Emerge on Flight 93," New York Times, July 22, 2004 (indicating flight was heading for Capitol or White House). And in October 2001 the Capitol had to be closed and decontaminated after members of Congress received letters laced with anthrax.

The extraordinary terrorism concern facing Washington D.C. is reflected in numerous recent measures taken in the war on terror. The airport closest to the Capitol Building -- Reagan National Airport -- was the only airport whose re-opening was in doubt, because of its proximity to the Capitol. It ultimately remained closed far longer after September 11 than any other

airport. Although it has since re-opened to air traffic, Reagan National has done so subject to security restrictions more stringent than those at other airports. It is the only airport where travelers must remain seated for 30 minutes after take-off or before landing. Washington D.C. is also the only region where the federal government subjects commercial and general aviation aircraft to a 30-mile no-fly zone.

An attack on the Capitol with ultrahazardous materials would likely prove especially attractive for terrorists because -- by creating an attack with deadly results for miles around the Capitol Building itself -- they could cause numerous deaths and damage a large number of other D.C. buildings that have symbolic importance in American political life, among them the White House, numerous federal agencies, and the monuments on the National Mall.

The only other metropolitan area that has been subject to a similar level of terror attacks and terror alerts in the recent past is the New York metropolitan area. Unlike the District, however, New York City has already imposed restrictions on hazardous materials routing. *See* New York City Fire Code, Chapter 40. By contrast, there are no restrictions on trains carrying ultrahazardous materials within four blocks of the Capitol.

The Federal Government has not acted to prevent the terrorist threat resulting from the transportation of dangerous volumes of ultrahazardous materials through the Capitol Exclusion Zone.

The Research and Special Programs Administration of the Department of Transportation has stressed that government “cannot limit [its] actions on security to efforts to prevent terrorist attacks that have already occurred” and that it must “proactively assess future terrorist threats and take actions to try to prevent future attacks.” Department of Transportation-RSPA, Hazardous Materials: Security Requirements for Offerors and Transporters of Hazardous Materials; Final Rule, March 25, 2003, 68 Fed. Reg. 14511. We must thus focus not only on restricting or re-routing aircraft that could be hijacked and used as weapons to attack the Capitol or other federal buildings, but also on whether other equally significant (or more dangerous) terror threats -- such as rail cars filled with toxic chemicals -- also need to be re-routed or restricted in the vicinity of the Capitol.

The Federal Government has not issued any rule or order addressing this issue. The U.S. Department of Transportation has issued rules requiring each hazardous materials shipper and carrier to develop and implement a security plan and provide its employees with security training. *Id.* But these measures do not even purport to address the threat that the mere presence of high volumes of ultrahazardous materials creates as described above, and they could not do so effectively.

The U.S. Department of Transportation has issued rules regarding hazardous materials accidents. But restrictions that safeguard against accidents are ineffective in protecting against the very different risk of a terror attack.

In the absence of any federal regulation addressing the risks of routing ultrahazardous chemicals in proximity to the most likely terror target within the District, the D.C. Council is compelled to respond to this grave threat to the welfare of its citizens, businesses, and visitors. We have

extensively examined the data relative to terrorism risks that shipments of such chemical create, the effects that such an attack would have on the local community, and the costs of diverting such shipments away from the Capitol region.

Ultrahazardous materials shippers do not need to route large quantities of ultrahazardous chemicals through the Capitol Exclusion Zone in order to ship such chemicals to their destinations, and alternative routes would substantially decrease the aggregate risk posed by terrorist attacks.

We have found, in the hearings leading to this Bill, that there is no reason to continue providing terrorists with the opportunity to create a release of toxic chemicals over a singularly attractive terrorist target. Indeed, the only reason such dangerous chemical shipments *do* pass within blocks of the Capitol appears to be historical happenstance. The routing of the rail lines over which hazardous materials are transported today is determined by the way that the “Nation’s rail infrastructure was laid out nearly a century ago,” when existing terrorism threats were unimaginable. Jan. 23, 2004 testimony of George Gavella, Associate Administrator for Safety, Federal Railroad Administration, before the Council of the District of Columbia at 1. It defies logic to think that we would continue to strictly adhere to existing routes even when they present significant problems in protecting primary terrorist targets (and those that live, near, or congregate near them) from a catastrophic attack. Indeed, the National Capitol Planning Commission has embarked on a study of the feasibility of relocating CSX’s downtown rail line, precisely in order to eliminate the risk of terrorist attacks on ultrahazardous cargoes.

There are other rail and road routes that could be used to deliver the same shipments, and these routes have been frequently used for such shipments. For example, the Norfolk Southern Railway -- 50 miles west of the District -- has and can be used to carry hazardous material. There are no such prominent terrorist targets on the alternative Norfolk Southern route that would be taken, and there would be no significant increase in any risk to locations along that route. As a result, the overall risk of death and economic damage posed by this form of potential attack would be virtually eliminated if the materials are not shipped through the Capitol Exclusion Zone.

Excluding ultrahazardous shipments from the Capitol Exclusion Zone (in circumstances where there is a practical alternative) would impose no significant burden on interstate commerce.

Although transportation of hazardous materials plays an important role in the commercial life of the United States, there is no necessity to ship such materials in close proximity to one of the most prominent terrorist targets in the United States. New York City has already passed regulations addressing hazardous materials risks. The District should follow suit. Nor is there any evidence of significant cost increases that would result, and certainly nothing that compares to the billions of dollars being spent annually on federal homeland security measures. To the contrary, transporters of hazardous materials themselves appear to have indicated they can afford to avoid creating such a risk. Truckers often avoid the Capitol Hill area to avoid congestion and

thus stay on the Beltway instead. Jan. 23, 2004 Testimony of Fred Millar before the Council of District of Columbia, at 7. As mentioned above, there is also an alternative rail line running through western part of Virginia, and the only rail company that carries hazardous materials through the Capitol Exclusion Zone, CSX, has stated that it has already re-routed hazardous materials shipments around the Capitol area – and there is no evidence that it (or shippers of ultrahazardous materials) would suffer significant economic damage from simply continuing a practice it has already reportedly been able to adopt and sustain over a period of months.

Other evidence before the Council indicated that the Bill’s requirements would not create significant burdens upon interstate commerce. Professor Theodore S. Glickman, who has analyzed risk assessment as it relates to transportation safety, testified that routing hazardous materials shipments away from a vulnerable, highly populated area such as the District would be less costly than preparing for, or sustaining the actual costs of, a terror attack on such shipments. Nov. 22, 2004 Testimony of Theodore S. Glickman before the Council of District of Columbia (stating that “there are ample opportunities here and elsewhere for re-routing hazardous material tank car traffic to avoid locations with dense population concentrations in ways that yield high benefits and low costs”). While one might worry that re-routing could lengthen routes and thus increase the risk of accidents, Professor Glickman’s analysis showed that rail shipments of hazardous materials could be routed away from the District while *decreasing* the route length. *Id.*

The number of cars that would have to be re-routed is only a small sub-set of the 8,500 rail cars of hazardous materials that CSX ships now ships through the District. Nov. 22, 2004 testimony of Rick Hind before the Council of District of Columbia, at 5. The D.C. Bill only affects a subset of hazardous materials (and only certain quantities of those materials) likely to threaten thousands of lives in the event of a terror attack. “[O]nly 10 toxic-by-inhalation substances are among the 150 most shipped by rail hazardous substances according to a December 2000 report by Argonne National Laboratory.” Nov. 22, 2004 Testimony of Rick Hind before the Council of District of Columbia, at 3. And re-routing under the Bill would require only the interchange re-routing of a small number of railcars of a sort that railroad cars already do on a routine basis. Jan. 23, 2004 Testimony of Fred Millar at 5. It is the Council’s expectation that the District will consult with other jurisdictions that may be affected by the provisions of this bill as appropriate.

Finally, railroad and trucking companies will continue to be able to ship even dangerous amounts of ultrahazardous material through the Capitol Exclusion Zone in the event of an emergency or where it can be shown that there is no practical alternative route.

Explanation of Specific Measures in Bill

In broad outline, the Bill establishes a circular “Capitol Exclusion Zone,” around the Capitol Building and requires a permit to ship specified large quantities of ultrahazardous materials (defined by reference to U.S. Department of Transportation regulations) within the “Zone.” In order to make the Bill enforceable, the permit requirement applies equally to large trucks and rail cars that are marked in such a way as to indicate that they contain small amounts or no ultrahazardous materials.

Permits may issue where it has been shown that re-routing shipment(s) would be “cost-prohibitive.” The permit requirement would be automatically lifted whenever DDOT determines that an emergency exists. These terms and concepts are described more fully below.

Emergency (Definition 1) - It is anticipated that in the event of an emergency that threatens the immediate safety of individuals or property (such as a tunnel fire in Baltimore or track flooding west of the District), the District Department of Transportation (DDOT) will issue an announcement to the effect that a hazardous materials emergency exists. Such an announcement should be posted on the Department’s web site, and transmitted immediately to CSX and Norfolk Southern, in order to minimize any burden on carriers, or any delay in learning that unrestricted passage through the Exclusion Zone is temporarily permitted.

Capitol Exclusion Zone (Definition 2) - This zone has been drawn in a circle 2.2 miles from the Capitol Building in view of the extraordinary security concerns centered on this area and the likely effects of a terrorist attack on a hazardous materials shipment of the minimum quantities described in the Bill.

Practical Alternative Route (Definition 4) - It the Council’s intent that permits be issued only upon a showing that re-routing ultrahazardous materials around the Exclusion Zone would be prohibitively expensive. The task for DDOT is to balance the potential burdens on interstate commerce against the potential economic and non-economic harm, including human losses and suffering, that would occur in the event of a successful attack on a shipment of ultrahazardous materials (the department may assume that all shipments pose the same risk; there is no need for a shipment-by-shipment risk assessment). Given the significant loss of life and likely economic impact of a large chlorine release, and that the probability of an attack is higher than one-per-one hundred thousand shipments, the permit applicant would have to show that the marginal cost of re-routing for any shipment or series of shipments would be extremely high.

Regulated substances (Section 2(a)) – The bill requires shipment permits for only a few very select categories of ultrahazardous materials, probably representing less than 5% of the conventional hazardous materials that move regularly through Washington. Of the 16 categories of hazardous materials listed in 49 C.F.R. § 173.2, the bill would regulate only four. Further, the bill would regulate only selected segments of these four categories, representing only the most lethal materials within those sub-categories. For example:

Explosives - Only two of the six federally-denominated categories of explosives are covered, and only in amounts greater than 500 kg. 500 kg represents an amount of such explosives that could inflict significant structural damage to an office building if detonated in the Capitol Exclusion Zone.

Flammable Gasses - Flammable gasses, if released, can seep into buildings and subway tunnels before igniting, thus causing catastrophic damage. The minimum quantity of 10,000 liters, if released at street level in downtown Washington, could kill great numbers of people.

Poisonous gasses - Poisonous gasses, such as liquefied chlorine, pose one of the greatest threats in this area. The bill regulates only the most highly toxic of the poisonous gasses denominated by the U.S. Department of Transportation -- those falling into Hazard Classes A and B (see 49 C.F.R. § 173.116). Poisonous gasses falling into Classes C and D are not regulated by the bill. The threshold quantity of 500 kg is intended to encompass shipments with the potential to inflict mass casualties. Of the containers that are most commonly used to transport chlorine, the smallest that would fall within the ambit of this provision would be the one-ton cylinder.

Poisonous materials, other than gasses - The bill regulates only the most lethal of this category of substances -- those that fall into Hazard Class A or B, according to 49 C.F.R. § 173.133.

Regulation of transport vehicles (Section 2(b)) - The bill regulates not only shipments of the materials discussed above in the quantities specified; for enforcement purposes, and because of the security threats posed by vehicles marked as containing hazardous materials, it also regulates movements of transport vehicles (chiefly trucks and rail cars) that are capable of transporting such substances in such quantities if the vehicles in question are marked in a manner indicating that they contain regulated substances. For example, if a conventional rail car that is marked “chlorine” and has its placard open (indicating that it is not empty) were to travel through the Exclusion Zone, a permit would be required.